

Work Order ID 74603

Monday, October 03, 2011 4:02:00 PM



Page 1

Item ID: D2933-1

Revision ID:

Item Name: Saddle LH In, 206

Start Date: 10/3/2011 Start Qty: 6.00

Required Date: 10/5/2011 Req'd Qty: 6.00

Reference:

Approvals:

Process Plan:

Date:

11-10-4

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D2933

Rev C

100

0.00



HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Program part number and batch number. ☐ 1-Inspect part number and batch number are programmed correctly. ☐ 2-Machine Step No 1 of Folio and visually inspect as per dwg D2933 & attached Dimension Sheet ☐ 3-Machine Step No 2 of Folio and visually inspect as per

FK- 12/03/17

6

110

0.00



CONVENTIONAL MILLING MACHINE

Mill Conv

Memo

0.00

Conventional Milling Machine

Machine Keyway and inspect per attached dimension sheet

FK- 12/03/17

6

120

0.00



QC1- Inspect dimensions to dimension sheet

QC

Memo

0.00

Quality Control

FK- 12/03/17

6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 74603

Monday, October 03, 2011 4:02:00 PM



Page 2

Item ID: D2933-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Saddle LH In, 206

Start Date: 10/3/2011 Start Qty: 6.00



Cust Item ID:

Required Date: 10/5/2011 Req'd Qty: 6.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130 QC8- Inspect parts - second check

0.00

SL

12/03/18



QC

Memo

0.00

Quality Control



140 Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

NG-123-19

150 White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME: 2h10

OVEN TEMPERATURE:

FINISH TIME:

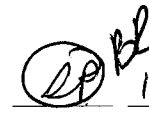
2h40

320°F

m120222

6

Q



12/03/20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 74603

Monday, October 03, 2011 4:02:00 PM



Item ID:	D2933-1	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Saddle LH In, 206					
Start Date:	10/3/2011	Start Qty:	6.00		Cust Item ID:	
Required Date:	10/5/2011	Req'd Qty:	6.00		Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 	QC3- Inspect Part Finish	0.00							
QC Quality Control	Memo	0.00							<i>6x/ m/ 12/3/20</i>
170 	Identify as per dwg & Stock Location: <u>428</u>	0.00							
Packaging Packaging	Memo	0.00							<i>12/3/21</i>
180 	QC21- Final Inspection - Work Order Release	0.00							
QC Quality Control	Memo	0.00							<i>12/3/21</i> <i>MF</i> <i>12-03-21</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Monday, October 03, 2011 4:02:04 PM

Page 1

Work Order ID: 74603

Parent Item: D2933-1

Parent Item Name: Saddle LH In, 206



Start Date: 10/3/2011

Required Date: 10/5/2011

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP: B□00.06.26□New DWG rev (mpp 2069)□EC□
IPP Rev:C As per Rev C 07-03-19 JLM □

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D6101-001		Manufactured	No			100	Each	4.0000	1	6			
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Saddle Billet

Location

Loc Qty

Loc Code

MAT040

4

66965

1

69677

2

73768

1

79586

6

F.K. 12/03/09

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	74603
Description: 206 Saddle, Inboard, Left side		Part Number:	D2933-1
Inspection Dwg: D2933 Rev: C DSK:		Rev:	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				1	2	3	4	5
A	0.100	0.140		.128	.126	.128	.128	.128
B	0.100	0.140		.129	.125	.126	.126	.128
C	0.100	0.140		.117	.118	.118	.118	.118
D	0.210	0.230		.225	.226	.225	.225	.225
E	1.245	1.255		1.250	1.250	1.250	1.250	1.250
F	1.245	1.255		1.250	1.250	1.250	1.250	1.250
G	2.495	2.505		2.500	2.500	2.500	2.500	2.500
H	0.510	0.515		.512	.512	.512	.512	.512
I	1.572	1.582		1.574	1.574	1.574	1.574	1.574
J	2.495	2.505		2.500	2.500	2.500	2.500	2.500
K	0.257	0.262		.260	.260	.260	.260	.260
L	0.312	0.317		.314	.314	.314	.314	.314
M	0.235	0.240		.237	.237	.237	.237	.237
N	0.100	0.140		.124	.124	.125	.125	.125
O	0.540	0.560		.549	.550	.550	.550	.550
P	0.490	0.510		.500	.500	.500	.500	.500
Q	3.715	3.725		3.720	3.720	3.720	3.720	3.720
R	2.470	2.510		2.491	2.491	2.491	2.491	2.491
S	0.240	0.270		.254	.253	.253	.253	.253
T	0.100	0.180		.135	.135	.135	.135	.135
U	1.625	1.635		1.630	1.630	1.630	1.630	1.630
V	1.362	1.372		1.367	1.367	1.367	1.367	1.367
W	0.316	0.321		.316	.316	.316	.316	.316
X	1.125	1.145		1.135	1.135	1.135	1.135	1.135
Y	1.565	1.585		1.574	1.574	1.574	1.574	1.574
Z	0.178	0.198		.188	.188	.188	.188	.188
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

Measured by: F.K.	Date: 12/03/17
Audited by: J	Date: 12/03/18
Prototype Approval: N/A	Date: N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	74603
Description: 206 Saddle, Inboard, Left side		Part Number:	D2933-1
Inspection Dwg: D2933 Rev: C DSK: Rev:		Page 1 of 1	

FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

Dim	Min	Max	Go/No Go Gauge	Record Actual Dimensions				
				6 X	2	3	4	5
A	0.100	0.140		.129				
B	0.100	0.140		.127				
C	0.100	0.140		.118				
D	0.210	0.230		.225				
E	1.245	1.255		1.250				
F	1.245	1.255		1.250				
G	2.495	2.505		2.500				
H	0.510	0.515		.512				
I	1.572	1.582		1.577				
J	2.495	2.505		2.500				
K	0.257	0.262		.260				
L	0.312	0.317		.314				
M	0.235	0.240		.237				
N	0.100	0.140		.125				
O	0.540	0.560		.550				
P	0.490	0.510		.500				
Q	3.715	3.725		3.720				
R	2.470	2.510		2.491				
S	0.240	0.270		.253				
T	0.100	0.180		.135				
U	1.625	1.635		1.630				
V	1.362	1.372		1.367				
W	0.316	0.321		.316				
X	1.125	1.145		1.135				
Y	1.565	1.585		1.574				
Z	0.178	0.198		.188				
AA								
AB								
AC								
AD								
AE								
Accept/Reject								

Measured by:	F.K.	Date:	12/03/17
Audited by:	SL	Date:	12/03/18
Prototype Approval:	N/A	Date:	N/A

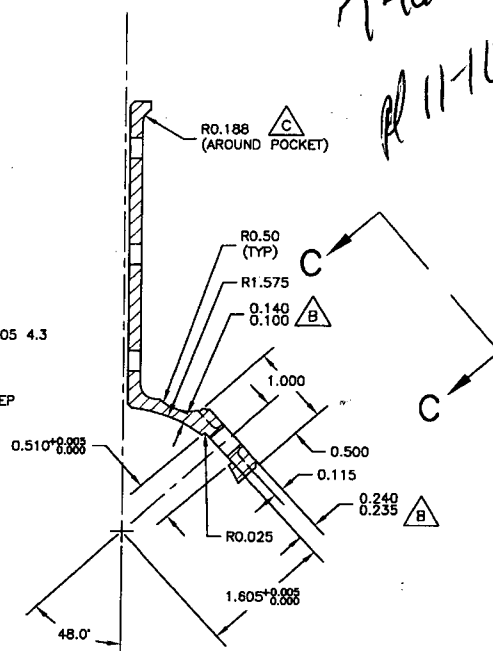
Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	
C	06.10.03	Removed DT8683, DT8686 & DT8690	KJ/JLM	
D	07.03.21	Revised per drawing revision C	KJ/JLM	
E	08.01.16	DT8695 A/B removed from dimension Y	KJ/EC/DD	



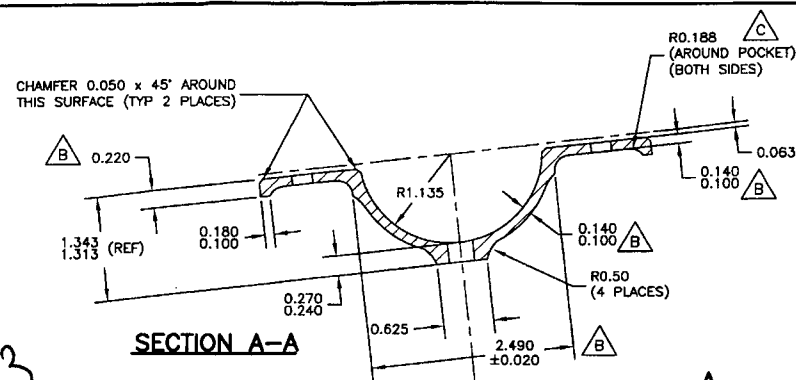
D2933-1 LH SADDLE (SHOWN)
D2933-2 RH SADDLE (OPPOSITE)

NOTES:

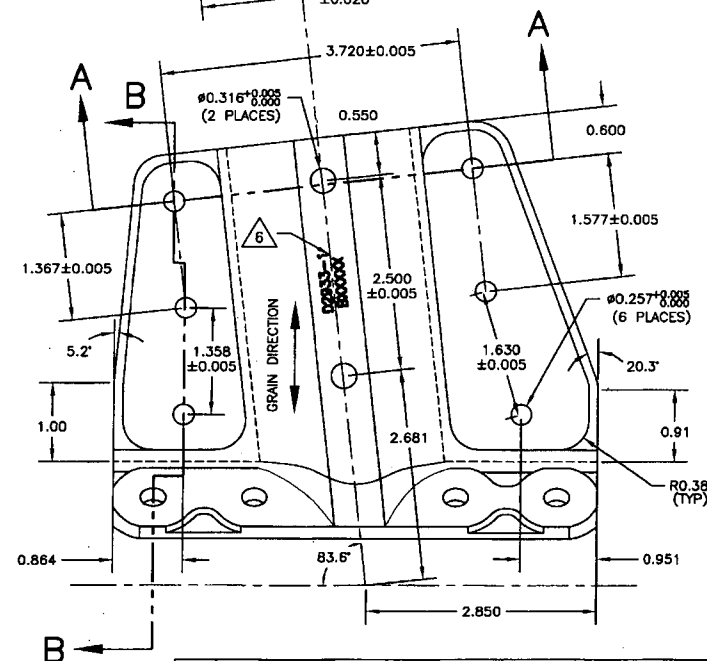
- 1) MATERIAL: ALUMINUM 7075-T7351 (QQ-A-250/12)
(MAKE FROM D6101-001 SADDLE BILLET, 7075)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- 3) BREAK ALL SHARP EDGES 0.010 TO 0.020
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP




SECTION B-B



SECTION A-A



C	06.11.09	R0.188 WAS R0.30 TO R0.25
B	00.05.29	CHANGED GEOMETRY AND MATERIAL
A	99.10.29	NEW ISSUE
DESIGN	DRAWN BY CB	 DART AEROSPACE USA, INC. BELLEVUE, WA
CHECKED PH	APPROVED H	
DATE 06.11.09		DRAWING NO. D2933 TITLE SADDLE INSIDE SCALE 2:1

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DART AEROSPACE USA, INC.

DART DART AEROSPACE USA, INC
BELLEVUE, WA

DRAWING NO.	REV. C
D2933	SHEET 1 OF
TITLE	SCALE
SADDLE INSIDE	2:3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: 1017 NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries